DRAFT Data Assessment Team (DAT) Conference Call Notes
12/19/13 at 11:00 a.m.

Participants: Lucinda Shih (CCWD), Dave Contreras and Geir Aasen (DFW), Edmund Yu, Elaine Jeu, Farida Islam, Jim Gleim, Kevin Reece, Loi Tran and Mark Bettencourt (DWR), Craig Anderson, Josh Gruber and Leigh Bartoo (FWS), Barb Byrne (NMFS), Eleanor Bartolomeo (SWRCB)

2013 Long-term Operations Biological Opinions Annual Science Review (Annual Review)
The Delta Stewardship Council has now posted the 2013 annual review panel report to its website: http://deltacouncil.ca.gov/science-event/9954.

Sacramento River Fish Monitoring

Preliminary Rotary Screw Trap (RST) Report				
Species*	**FWS Red Bluff Diversion Dam RST (Estimated Passage)****	**Glenn-Colusa Irrigation District (GCID) RST (Catch)*****	**DFW Tisdale Weir RST (Catch)********	**DFW Knights Landing RST (Catch)********
Date	**12/3/13 to 12/16/13**	**12/5/13 to 12/12/13**	**12/5/13 to 12/18/13**	**12/5/13 to 12/18/13**
CHNF	84,329	33		
CHNLF	33,894	99		
CHNW	169,087	794	1	
CHNS	39,909	26		
Ad-Clipped CHN	Not reported			
SH	516	1		
Ad-Clipped SH	Not reported			
GST	Not reported			
*Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, GST= Green Sturgeon. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.				

**Overall, there has been an increase in passage for all reported species since the last reporting period (11/19 to 12/2) at the Red Bluff Diversion Dam.

As of 12/16, the brood year 2013 total for winter-run Chinook salmon is at 1,556,620.

***GCID removed the RST from the bypass channel for repairs on 12/12. Trapping will not continue until further notice.

****DFW plans to raise the RSTs on 12/24 and resume sampling on 12/26 to accommodate staff for the holidays.

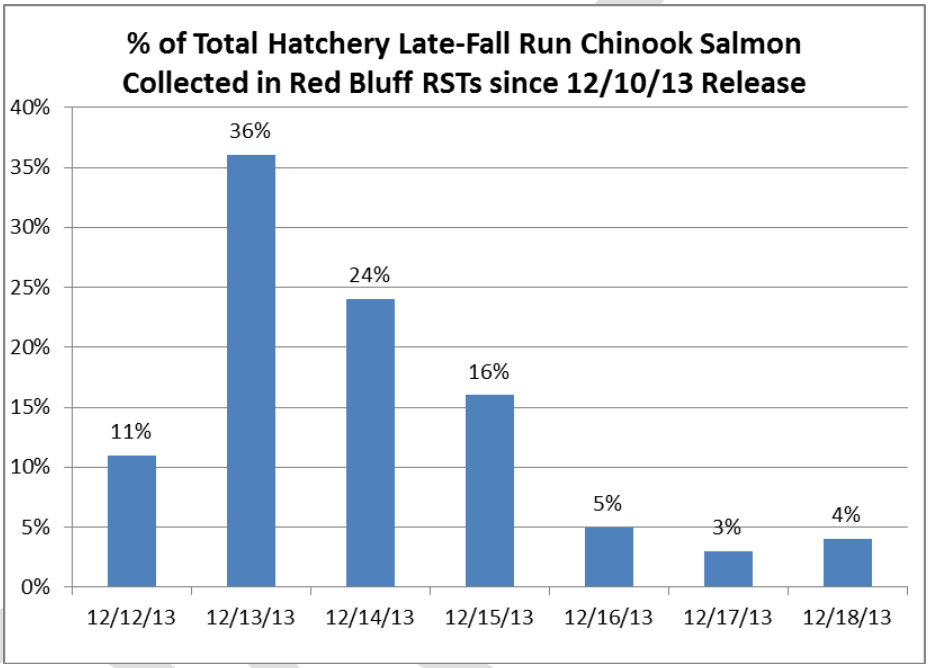
Graphical summaries of the monitoring data collected at the Sacramento River and at other locations can be found at http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm. In addition, the biweekly passage reports of juvenile salmonids sampled at the Red Bluff Diversion Dam are available at http://www.fws.gov/redbluff/rbdd_biweekly.aspx.

Hatchery Release Update
On 12/10/13, the Coleman National Fish Hatchery released about 275,536 late-fall run Chinook salmon at Battle Creek as part of its brood year 2013 production release. This production release ranged in fork length from 69 to 222 mm. Of the 275,536 Chinook salmon released, 267,301 were ad-clipped with a coded-wire tag, 7,834 were non-clipped with a coded-wire tag, and 401 were non-clipped without a coded-wire tag.

There are no triggers or annual incidental take limit at the Delta pumping facilities associated with this production release. However, the non-clipped late-fall run Chinook salmon from this release could be

classified as an older juvenile Chinook salmon if observed at the Delta pumping facilities and could be included in the daily loss density calculations for implementation of both NMFS RPA Action IV.3 (salvage and entrainment reduction) and IV.2.3 (Old and Middle River (OMR) flow management). This will depend on which facility the non-clipped hatchery Chinook salmon is observed at and whether it has a coded-wire tag. The Central Valley Project's (CVP) Tracy Fish Collection Facility does wand every Chinook salmon observed, but the State Water Project's (SWP) Skinner Delta Fish Protective Facility usually does not wand any non-clipped Chinook salmon.

As of 12/18, this production release has not been collected at the GCID, Tisdale Weir or Knights Landing RSTs, but has been collected in catch at the Red Bluff Diversion Dam RSTs. Josh Gruber (FWS) provided a graphic to DAT participants during the conference call that showed the percent of total catch observed at the Red Bluff Diversion Dam since the production release (see below).



In summary, hatchery late-fall run Chinook salmon showed up two days after they were released at Battle Creek and hatchery late-fall run Chinook salmon catch at the Red Bluff Diversion Dam peaked on 12/13 before trickling down in subsequent days. There was no flow or turbidity increase from 12/10 to 12/18 that would have triggered a large number of hatchery late-fall run Chinook salmon to move downstream. However, hatchery late-fall run Chinook salmon are moving downstream based on these preliminary data. Generally, FWS observes hatchery Chinook salmon for a longer duration at the Red Bluff Diversion Dam RSTs when there is no flow event. When there is a flow event, a lot more fish move downstream right away.

Unfortunately, it will be hard to determine the number of hatchery late-fall run Chinook salmon detected at GCID since the traps have not been in operation since 12/12 due to repairs. Even without the need for repairs, GCID was planning to raise the cone for a few days due to the expected presence of hatchery late-fall run Chinook salmon from the release. This was needed to allow passage for a few days at GCID to prevent overcrowding the live well over night given how efficient the RST is in its current location. GCID had some concerns with allowing a large amount of hatchery late-fall run Chinook salmon to be trapped with smaller non-clipped Chinook salmon that could cause injury and mortality to listed species. GCID's Section 10 permit includes a limit on the number of indirect moralities, and GCID sampling could be discontinued if the indirect mortality limit is exceeded.

Delta Fish Monitoring

Preliminary FWS Trawl and Seine Catch Report from 12/8/13 to 12/14/13				
Species*	**Beach Seines**	**Mossdale Trawl**	**Sacramento Trawl**	**Chipps Island Trawl**
CHNF				
CHNLF				
CHNW				
CHNS				
Ad-Clipped CHN				
SH				
Ad-Clipped SH				1
DSM				7 (57 to 78 mm, no expression)
LFS				27 (64 to 135 mm, 7 with eggs, 3 with milt)
SPLT				4
*Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, DSM=Delta smelt, LFS=Longfin smelt, SPLT = Splittail. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.				

Information about the Delta fish monitoring data from FWS can also be found at http://www.fws.gov/stockton/jfmp/.

Salvage Monitoring

As of 12/18, no listed species have been salvaged at the Delta fish facilities during water year 2014.

Salvage information is posted on the salvage FTP site (ftp://ftp.dfg.ca.gov/salvage/). If you cannot access the FTP site, you can also go to http://www.dfg.ca.gov/delta/apps/salvage/Default.aspx and click on "Salvage FTP Site."

Smelt Monitoring

DFW conducted the December 2013 Fall Midwater Trawl from 12/2 to 12/17. Delta smelt and longfin smelt catches from this December survey are presented in the tables below.

Delta Smelt Catch		
Location	**Catch**	**Length (mm)**
Grizzly Bay	1	63
Montezuma Slough	1	57
Honker Bay	3	64 to 66
Confluence	3	61 to 65
Lower Sacramento River	1	62
Sacramento River Deep Water Shipping Channel*	1*	52*

*DFW collected the delta smelt in the Sacramento River Deep Water Shipping Channel in the mysid net and not the midwater trawl net. The Fall Midwater Trawl annual abundance index only considers the delta smelt collected in the midwater trawl net and at an index station. The Sacramento River Deep Water Shipping Channel monitoring site is not an index station.

Longfin Smelt Catch		
Location	**Catch**	**Length (mm)**
San Pablo Bay	5	65 to 133
Napa River	4	61 to 107
Carquinez Strait	12	57 to 127
Suisun Bay	10	50 to 109

Montezuma Slough	1	74
Honker Bay	8	56 to 120
Confluence	9	58 to 124
Lower Sacramento River	4	57 to 115

Annual abundance indices for the 2013 September to December Fall Midwater Trawl will be available either by the end of December or in early January. For more information about the Fall Midwater Trawl, please visit the DFW website: http://dfg.ca.gov/delta/projects.asp?ProjectID=FMWT.

Smelt Working Group

The Smelt Working Group reviewed the relevant monitoring data on Monday (12/16) via e-mail and no members of the Smelt Working Group expressed a desire to meet based on the monitoring data available at the time. Data will be distributed to the Smelt Working Group again next Monday (12/23) to see if there is a need for the Smelt Working Group to meet to discuss the monitoring data. A meeting will most likely not be convened until there are major changes to the hydrology.

At this time, the Smelt Working Group is monitoring conditions for the increased risk of delta smelt entrainment to determine whether to initiate FWS RPA Component 1, Action 1. After 12/20, the Smelt Working Group will be tracking set triggers for the initiation of Action 1. Excerpts of the Action 1 triggers from the 2008 FWS BiOp are below (page 329).

> *Turbidity:* 3-day average of 12 NTU or greater @ all three stations (Prisoner's Point, Holland Cut, Victoria Canal)
>
> OR
>
> *Salvage:* Three days of delta smelt salvage after December 20 at either facility or cumulative daily salvage count that is above a risk threshold based upon the "daily salvage index" approach reflected in a daily salvage index value ≥0.5 (daily delta smelt salvage > one-half prior year FMWT index value).

After the Smelt Working Group update, there was a question on how the Smelt Working Group plans to track the salvage trigger in Action 1 after 12/20 if the Fall Midwater Trawl index value is not available. To answer this question, Leigh Bartoo (FWS) stated that FWS management would likely have to provide guidance on this issue if delta smelt are salvaged and the Fall Midwater Trawl index is not available. Bartoo imagines that FWS management will most likely encourage DFW management to release the Fall Midwater Trawl index for delta smelt as quickly as possible if salvage does occur.

The Smelt Working Group notes and FWS determinations are posted at http://www.fws.gov/sfbaydelta/cvp-swp/smelt_working_group.cfm.

Delta Operations for Salmonids and Sturgeon (DOSS) Working Group

DOSS met on Tuesday, 12/17, reviewed the usual monitoring and operations data, and provided advice to NMFS and the Water Operations Management Team (WOMT). The DOSS advice and a few discussion highlights are provided below.

DOSS Advice to WOMT and NMFS:

Background:

Action IV.2.3, relating to OMR flow management, calls for OMR flows to be less negative than -5,000 cfs when certain triggers are exceeded. One of the triggers is based on the winter-run Chinook salmon juvenile production estimate (JPE). NMFS does not expect to have a final JPE by 1/1/14, and DOSS was asked for feedback on whether to implement Action IV.2.3 (a) using a trigger value based on a preliminary JPE estimate, or (b) using the remaining triggers that do not depend on the JPE.

In the past, DOSS has provided different advice to NMFS and WOMT on how to implement the winter-run JPE based trigger when a final JPE estimate is not available. For instance, DOSS recommended using

the minimum loss-density trigger values of 2.5 fish/TAF and 5.0 fish/TAF in one year since the JPE based trigger was expected to be lower than the minimum trigger values due to the low escapement.

In another year, DOSS recommended using a preliminary estimate until the final JPE is available. However, it would be difficult for NMFS to issue a preliminary JPE estimate this water year since the Interagency Ecological Program's (IEP) Winter-run Project Work Team is currently in the process of providing a recommendation to NMFS to lower the smolt to Delta survival estimate based on new studies that would lead to a lower JPE. In turn, this would lead to a lower annual incidental take limit for winter-run Chinook salmon and to lower daily older juvenile loss density triggers based on the JPE than what would be calculated using the current survival terms in the JPE calculation. At this time, NMFS is not seeking advice from DOSS on the survival terms used in the JPE.

Advice:
DOSS advises that, until NMFS issues the final winter-run Chinook salmon JPE, Action IV.2.3 be implemented using the triggers that do not depend on the JPE.

Tracy Fish Collection Facility Secondary Channel Construction and Inspections:
NMFS provided information to DOSS on the planned inspections in preparation for the installation of new fish screens at the Tracy Fish Collection Facility. Installation of the new fish screens will require periodic shutdowns of the fish collection facility for inspections before construction begins in April or May 2014. DOSS was asked to provide guidance on sampling protocols during these disruptions to the usual salvage and sampling process; after some discussion, it was suggested that NMFS talk further with staff at the fish collection facility and that a suggested protocol be presented to DOSS for feedback.

RPA Actions:

- IV.1.1 (Monitoring and alerts for Delta Cross Channel (DCC) gate operations): No alerts tripped in the past week.
- IV.1.2 (DCC gate operations): No alert or triggers exceeded in the past week.
- IV.3 (Salvage and entrainment reduction): No triggers or alerts exceeded in the past week; the triggers for reduced exports will end on 12/31/13.
- IV.2.3 (OMR flow management): This action begins 1/1/14.

Next DOSS Meeting:
The next DOSS meeting is scheduled for 1/7/14. There will be no scheduled DOSS meetings over the next 2 weeks, but any DOSS member can convene a meeting if the monitoring data requires a discussion or recommendation from DOSS.

Barb Byrne (NMFS), the DOSS representative on DAT, will be out on vacation during the next two weeks. In her absence, Jeff Stuart (NMFS) will be the DOSS representative for DAT.

DOSS notes and related documents are posted at
http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/doss.html.

Operations

Preliminary Summary for 12/19/13			
SWP		**CVP**	
Clifton Court Inflow (cfs)	2,000	Jones Pumping Plant (cfs)	1,000
SWP San Luis Reservoir Share (TAF) as of Midnight	253	CVP San Luis Reservoir Share (TAF) as of Midnight	307
San Luis Reservoir Total (TAF) as of Midnight	560	American – Nimbus Reservoir Releases (cfs)	1,300
Feather – Oroville Reservoir Releases (cfs)	1,250	Sacramento – Keswick Reservoir Releases (cfs)	3,750
		Stanislaus – Goodwin	200

		Reservoir Releases (cfs)	
DELTA OPERATIONS			
Outflow (cfs)	~4,300	DCC Gates	Closed (for fish protection via NMFS RPA Action IV.1.2)
X2 (km)	> 81		
Export/Inflow (%)	30.5 (3-day average)		

Weather Forecast: Based on what was reported to DOSS on 12/17, the outlook continues to be dry for the next few weeks.

A summary of daily operations can also be viewed at http://www.water.ca.gov/swp/operationscontrol/docs/delta/deltaops.pdf.

Next Conference Call: The next DAT conference call is scheduled on 1/9/14 at 11:00 a.m. DAT will not convene over the next two weeks since there are no scheduled WOMT, DOSS, or Smelt Working Group meetings. However, any DAT participant can request a DAT conference call by e-mailing Edmund Yu and Farida Islam (DWR) if there is interest to convene.